Sidney Public Schools

"Focus on instruction has worth. We recognize that to have an impact on kids we have to have strategies and that we have to take the strategy from professional development and put it in the classroom."

Initial Implementation of the Iowa Professional Development Model

A. About the District

The Sidney Community School District includes two schools (one high school and one elementary school) and serves 385 students in pre-K through 12th grade. The town of Sidney is in rural southwest Iowa, close to the Missouri and Nebraska borders. This district is served by AEA 13.

Students in the Sidney school district are primarily white and middle class. Ethnic minorities, English language learners, and low SES students comprise less than 10 percent of the total population. The special education population, however, is 22 percent of the total student population.

Sidney Elementary School enrolls 214 students in grades K- 6th grade. The elementary school is administered by elementary principal, Carolyn Maher and has 20 teachers. **Sidney High School** serves 171 students, is staffed by 18 teachers and is administered by Susan Peterson, the secondary building principal. Each building closely resembles the district in its demographics.

This district is participating in the E2T2 project, a grant that supports the integration of technology and instruction. In this AEA the grant is supporting a technology and mathematics initiative.

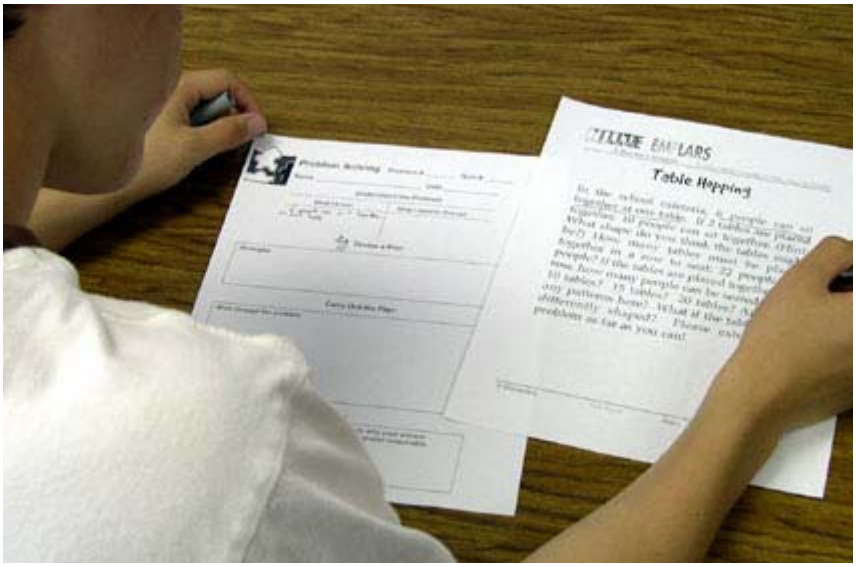
The district has no school listed as Schools in Need of Assistance.

Department of Education Site Visit

DE staff visited Sidney Community School on April 16, 2004. The principals, Carolyn Maher and Susan Peterson and the entire leadership team were interviewed as a group. The principals and individual teachers were interviewed during the day, and many classrooms were observed in both

buildings. The AEA consultants who have worked closely with this school, Kerry Airstrope, Colleen Confer, and Maryann Angeroth participated in group interviews. Also attending the interviews were AEA administrators, Joan Crowl and Marilyn Weber.

B. Applying the Operating Principles



Prior to engagement in the training on the Iowa PD Model Sidney had begun working on curriculum alignment and is continuing to emphasize the alignment of key instructional concepts with ongoing assessment through the L to J effort. L to J was described by the faculty as a process that enables teachers to be intentional about delivering instruction, measuring student progress on standards, benchmarks and priority concepts, and adjusting instruction based on student data. The training and follow-up for this method appear to emphasize process rather than to increase repertoire in instruction on academic content. The problem solving initiative does focus on instruction and increasing student repertoire in strategies intended to increase student achievement. By combining a professional development effort that increases teaching skills with a process that sharpens the teachers' instruction on priority skills, the district is focusing its attention on instruction, curriculum and assessment in order to accomplish gains in student achievement.

Participative Decision Making

Sidney had a tradition of using a study team approach that allowed for teacher self selection of topics and voluntary participation in learning. The addition of the late starts to their work week for the express purpose of engaging the faculty in professional development, along with their participation in the Iowa PD model, has shifted their professional development from a voluntary approach to full faculty engagement in collective professional development.

"Participation in professional development has re-socialized teachers. Refusing to implement is no longer acceptable. We have new norms. We are now looking each other in the eye and talking about students. Teachers are more willing to pitch in, and one formerly resistant teacher is now a leader. The teachers love the accountability."

While the Principals provide consistent leadership, the professional development leadership team also provides for decision-making regarding professional development. The AEA consultant plays a major role in guiding the decision making process relative to professional development.

The Sidney leadership team for professional development includes the two principals, and teacher representatives from various grade levels and role groups from both schools. The leadership team meets weekly and addresses elements of the PD cycle as needed. Decision making appears to be primarily focused on designing agendas for future meetings.

Simultaneity

The leadership team and for the most part the general faculty appeared to be focused on the problem solving initiative and L to J assessment process. A challenge for the leadership team will be to integrate the current PD focus on problem solving with existing initiatives in such a way that both support the student achievement goal rather than compete for teacher time and attention. Documents submitted by the district list ITI, Spanish, What Works, Data Not Guess Work, Standards and Bench Marks, and use of technology (ICN, discussion board, video conferencing) as initiatives requiring attention.

Leadership

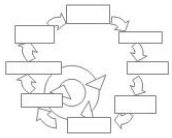
Both principals are actively involved as instructional leaders at Sidney. Principals participate in leadership team meetings and are knowledgeable about PD content and its implementation in the classrooms within their schools. Both principals routinely conduct walk-throughs and document evidence of implementation when they see it. Interviews also revealed that the principals have demonstrated how to implement the strategies and collect and analyze implementation data. The teacher evaluation system use portfolios which include PD data and the documentation from walkthroughs. The professional development processes are linked with the evaluation system. Principals reported that the connections between the evaluation system and professional development make it easier to keep the focus on instruction and to build in support for teachers. Principals keep the focus of the school on data analysis and goals for student achievement. The interviews indicated that the principals set a tone with the staff that established a positive culture for learning.

"Keeping the individual teacher professional development and the district/building professional development aligned is important. This helps with keeping portfolios and makes it easier for the principal to keep the focus on instruction and working on goals. The emphasis is not pressure for accountability but rather on support."

"Teachers see how it [professional development] helps me to be a better teacher and how to make an impact on kids in the classroom."

"The principal must be there every step of the way and buy into it. If the principal sits and does paper work while others are in staff development, it sends a terrible message. The principal must know the strategies to expect in the classroom."

C. The Professional Development Cycle



As is true of all the schools and districts who participated in the initial orientation to the Iowa Professional Development Model during the 2003-04 academic year, Sidney has addressed some components of the PD cycle more thoroughly than others. In recent years, Sidney has focused on the collection and analysis of student data. This district has adopted the data analysis methods of an external consultant, Bill Rauhauser and has implemented the L to J approach for studying student progress. Using student data to make decision is not new to the district, but the practice of using the data to design, adjust, and sustain professional development was reported as a departure from past practice.

Collecting and Analyzing Student Data

ITBS data were analyzed for the entire district at grades 4, 8 and 11 to provide a context for designing professional development. Sidney Community School District students are proficient in reading in grades 4, 8, and 11 respectively at the 64.2%, 54.8% and 80.6 % levels. Of particular concern was the gap between low SES students and the general population in reading. Also of concern was the gap between IEP and non-IEP students in the school. 22 percent of students at Sidney have IEPs.] The figures for proficiency in math are 64.2%, 64.4% and 82.3%, respectively. Data analyses revealed multiple areas of need and concern, the district chose to focus in the areas of problem solving (at the elementary level, applied to math; at the secondary level, applied to all subject areas). Other equally viable needs were apparent from the data analyses but the district was probably wise to focus limited PD resources on a single area while learning the Iowa PD Model.

[A greater concern would appear to be 4th and 8th grade reading. Why did they start with math?]

Goal Setting

Data analyses led to the following goal for increased student achievement (to be addressed through the school's PD agenda):

District Goals

1) At least 90% of the students in grades 5, 7, or 10 will show an increase in their NSS on the ITBS/ITED in mathematics.

2) At least 90% of the students in grades 5, 7, or 10 will show an increase in their NSS on the ITBS/ITED in reading comprehension.

3) Higher percentage of students in 4, 8, or 11 scoring in the proficient level on the science scores than in the low performance level using triennial national norms as measured by ITBS/ITED.

Building Goals (Elementary and Secondary)
1) Increase student achievement at middle level math through professional development of teachers

2) 100% of Sidney faculty members will implement the problem solving strategy at least once a week as evidenced by implementation logs

3) 100% of Sidney faculty members will implement the L to J quizzing of curricular concepts (to include problem solving concepts) at least once a week in one curricular area as evidenced by implementation logs and class run charts.

Selecting Content

The professional development target for this district is to increase students' skills in problems solving with elementary teachers applying problem solving steps to math instruction and secondary teachers using problem solving in their respective content area. The district is also focusing on teacher skills in using data to make instructional decisions using the L to J method. Sidney reported that they had AEA support in selecting content that has a research base. Interviews indicated that they consider the L to J model as having a research base and the Polya four step problem solving strategies as being well documented as having a scientific research base. The Polya research articles were submitted to the Iowa Content Networks for review. The professional development leadership team may want to learn more about how to evaluate the content offered to them from the AEA and how to use the literature that supports the strategy to design professional development.

Designing Process for Professional Development

Weekly meetings are held in a central location, where all faculty meet in mixed teams (various role groups and grade levels). The district has made a commitment to weekly late starts to enable the staff to engage in professional development. Team meeting times are structured, with a set agenda and guidelines for conducting collaborative work. Minimal training time was spent on setting up these roles and teaming routines. Faculty members report that the time spent in common meetings is essential for the implementation of this model and for accomplishing their goals for increased student achievement.

Problem Solving Strategies: Training began in January of 2004. The AEA staff delivered some theory in the form of presentations and reading materials. The AEA is trying to find external experts on the problem solving strategy to provide more support.

"We know staff development is ongoing. We appreciate not being pressured to learn something in a month. It takes time to go in depth."

Demonstrations are provided in the form of "think-alouds" on how to solve a problem. Initial demonstrations were done in a large group with modeling of real world adult problems and a demonstration of how to solve the problem. This was followed with individual practice, more group modeling, and then small group practice. Demonstrations were primarily provided by the AEA staff. Now faculty members are beginning to provide demonstrations. The High School

Principal did a demonstration in one of the content areas. AEA interview indicated a need for more demonstrations.

Peer observations are not formally and deliberately built into the design. Mentor and mentees are seeing observations as well as some informal partnerships among the faculty.

The training design form submitted by the district indicates that practices were to be implemented on a weekly basis in the classrooms.

L to J theory was provided in a full day professional development session at the beginning of the school year. The documentation provided by the district suggests that the practice for the L to J was provided early in the school year and that the practice is now internalized. This determination does not appear to be based on implementation data. However, in the elementary schools, wall charts graphing progress on math concepts are a very visible sign of implementation.

Learning Opportunities Schedule

(All teachers are expected to attend):

35 late start Monday mornings (1 ½ hours per Monday)
1 full day in August

"[Release time has] been a gift. It allows us to pace ourselves. We started with study teams and we had to get to the point that professional development wasn't a voluntary approach."

On-Going Cycle

"Weekly logs keep you doing the strategies and help you to focus on what you are doing."

The on-going cycle of learning opportunities, collaborative team meetings, the study of implementation, and the analysis of formative student data occurred primarily in the structure of team meetings. All of the training on the problem solving strategies was provided by the AEA staff. Apparently, AEA staff learned the strategies by reading the literature; they have not received specific training in how to implement the strategies. The AEA consultants have contacted a researcher in Canada for assistance but are primarily self-taught in the strategy.

Training in L to J was provided by AEA consultants who learned the strategy from the developer of the L to J process.

Secondary teachers in the various disciplines are working on finding ways to apply the problem solving content in their academic area. For example, teachers in family/consumer science and physical education were trying to find ways to work problem solving into their teaching.

Collaboration and Implementation

"New teacher interview: It has helped to have a core group of teachers that are available to help. It is important to know what to focus on and where to put efforts. The support of peers is very important."

The Sidney staff has established clear routines for working together collaboratively in the weekly team meetings. They have identified roles and procedures for collaborative team meetings and appear to work together productively on assigned tasks. Team meetings include discussion about what works in their classrooms, suggestions for refining practices, problems that may be occurring and ways to adjust practices that need attention. Agendas for the team meetings are

established by the AEA consultant. Interviews indicated that the faculty values the collaborative meeting times and the opportunity to work with peers.

The team meetings include time for sharing of teacher perceptions of what is working but do not currently include collaborative planning of lessons and the study of implementation data.

"Having all teachers working as part of the team is a strength. There is peer pressure to keep moving and to try it. You see the effects on students and it is exciting to see student progress."

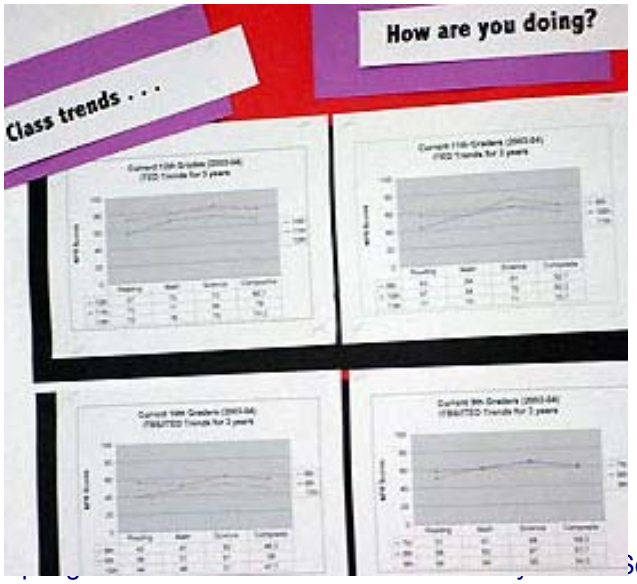
Teachers were expected to implement each strategy once a week. (The Implementation Plan submitted suggests the rationale for this schedule is based on ECR and the Iowa PDM – this may be a concern in that neither of these initiatives suggests a frequency for the strategies the district has selected for study. Rather, research on strategies is the best guide to ideal frequency of use.)

During the site visit walk-through, graphs/charts were noticed in most classrooms but at the secondary level several of the graphs did not include recent entries, suggesting that teachers are not entering the data according to the implementation plan and may not be implementing as frequently as intended in the plan.

"A math teacher and PE teacher developed a lesson together that applied problem solving strategy by setting up an obstacle course and assigning teams of five to safely negotiate the course, getting all members to the end. Students had to use their skills in problem solving to cooperatively solve the problem."

District forms and faculty reports indicate that they study implementation of the problem solving strategy on a weekly basis. Student skills are assessed by math probes. On alternating weeks teachers use a rubric to check implementation. Class graphs are used to record application of the steps in the problem solving model. At the secondary level 2-page logs are collected that ask – What do you have trouble with? What strategies have you used? What difficulties did students have with the problem solving steps?

At the time of our site visit, no system was in place for looking objectively at the quality of problem solving lessons.



Implementation efforts that the visiting team members were looking for during classroom visits were problem solving and the use of L to J. Classroom visits at the high school revealed many charts posted throughout the school but few classrooms with currently updated L to J graphs. One classroom was made available to us to observe the problem solving strategy being applied with students in a math lesson. Another classroom visit featured students finishing a quiz, figuring out their score, and plotting it on the L to J chart.

Implementation at the high school level did not appear to be school wide.

Interviews indicated that the individuals who were involved with earlier effort to manage data (Data Not Guesswork) were implementing, while those who began the L to J this fall without prior training were less likely to be consistently implementing.

Elementary observations included students taking a math test and preparing to score it and graph results. In another room the teacher was modeling how to a use estimation and determined what information was needed to solve the problem. In a third classroom the teacher presented two very challenging problems and demonstrated the problem solving strategies. In the elementary school every classroom had displayed on the wall a list of problem solving strategies to be used in math (a graph showing class means on periodic tests of problem solving [formative data] and a graph of "L to J" test scores on the district's math standards.)

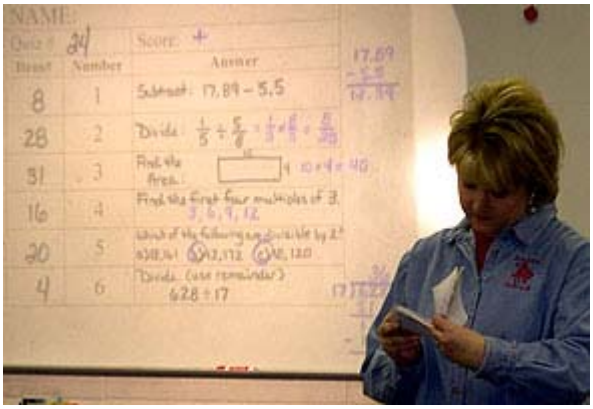
In both buildings informal student interviews suggested that students were aware of and interested in graphs. Elementary students were quite concerned when the slope of the line tilted downward.

Formative Data Collection

Implementation

Logs are submitted to the Leadership team. The Leadership team uses the data to plan the next collaborative team meeting. Any adjustments that are made appear to be in response to comments made in the logs.

Principals are beginning to consider implementation data in a more quantitative way. They are starting to look at high, middle and low implementing staff, how frequently quizzes were given (L to J) and the frequency of implementation.



Student Learning

Math probes are used to monitor student learning. Quizzes are used to keep track of student progress on key concepts.

Summative Data

ITBS data will be used to evaluate program effectiveness. ITBS is administered in the fall (?) in the Sidney district and the first evaluation will occur mid-year in the 2004-2005 academic year.

External Technical Assistance

Sidney's provider for staff development is AEA 13; The AEA provided technical assistance in data collection and analysis and also provided all the training and resources in the Problem Solving and the L to J training. Interviews indicated that the Sidney leadership and staff were appreciative of the technical assistance and support provided by the AEA on an ongoing basis.

D. Observations About the Site Visit

The Sidney School District board has agreed to provide weekly late starts for three years and has provided the resource of time to learn together to their faculty. This commitment of time and support will greatly enhance the success of professional development in Sidney.

E2T2 has expectations for use of Quick Topic (discussion boards) and IP conferencing technologies. Interviews indicated that at this point these tools are not widely used by the faculty and are not yet contributing significantly to professional development practice. Initial technical problems have limited teacher access until recently.

Sidney school district has made excellent progress in its first effort to implement the Iowa Professional Development Model. It has solved the issues raised by the operating principles (focus on curriculum and instruction, shared decision-making, strong and distributed leadership,

This site was strong in the areas of analyzing data and providing time for learning opportunities and collaborative teams. It has made promising first steps toward monitoring an implementation and collecting formative data.

Primary agendas in the coming year will be to structure teams for planning of more sophisticated use of problem solving steps, ways to objectively assess the quality and/or fidelity of problem solving lessons, and the identification of more standardized measures for use in formative data collection.

Collaborative team meetings that include more opportunities for teachers to design lessons together and build in scheduling of teacher observations would strengthen the PD in this district.

It appeared that teacher report on how things were going and celebratory remarks by individuals influenced decisions that shaped future staff development. Anecdotal perceptual data is useful but should be balanced with analysis of quantitative data on frequency and quality of implementation.

A subset of the Professional Development Leadership team assessed the district's implementation of the attributes of quality professional development in May 2003 and again in April of 2004. The self assessment indicated that the district made good gains in several areas including: placing the focus on instruction and curriculum, providing intensive professional development, and supporting collaboration. According to this self-report, Sidney school district made significant progress in the study of implementation, involving all site and district personnel in PD, and in ongoing follow-up, support and technical assistance. The area of formative evaluation was rated as not yet fully in place last year and again this spring. The information collected through interviews, document reviews, and classroom observations would corroborate this estimate of progress.